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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,081	05/31/2001	Dae-Sik Oh	1639	9317

28005 7590 10/05/2004

SPRINT
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

EXAMINER	
DEAN, RAYMOND S	
ART UNIT	**PAPER NUMBER**
2684	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/871,081	OH, DAE-SIK	
	Examiner	Art Unit	
	Raymond S Dean	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *March 12, 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see amendment, filed June 28, 2004 with respect to the objection to the disclosure as including a hyperlink on page 13 have been fully considered and are persuasive. The objection has been withdrawn.

2. Applicant's arguments, see amendment filed June 28, 2004 with respect to the objection to Claim 12 as including improper dependency have been fully considered and are persuasive. The objection has been withdrawn.

3. Applicant's arguments with respect to claims 1 – 5, 7, 9 – 12, and 23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 5 – 8, 13, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view Kamel et al. (US 2002/0123362).

Regarding Claim 1, Soliman teaches a method of controlling power used for communications between a mobile station and a base station (Column 2 lines 21 – 57),

the method comprising: determining a location of the mobile station (Figure 1, Column 4 lines 7 – 15); based on the location, selecting a power level for communication between the mobile station and the base station (Figure 2, Column 7 lines 11 – 29, a power level that is within the power range bounds for the location is selected);

Soliman does not teach an initial power level and starting at the initial power level, engaging in a power control process that regulates the power used for communication between the mobile station and the base station.

Kamel teaches an initial power level (Section 0035 lines 4 – 11) and starting at the initial power level, engaging in a power control process that regulates the power used for communication between the mobile station and the base station (Section 0035 lines 4 – 11, there can be a power control process after the initial power level is selected).

Soliman and Kamel both teach a CDMA system that conducts power control and a CDMA system in which there are data transmissions between the mobile stations and base stations thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the initial power level and power control process after said power level has been selected taught by Kamel in the CDMA system of Soliman for the purpose creating an efficient transmission rate, which is typically the highest transmission rate supportable by the available system resources, for the transmission of data as taught by Kamel.

Regarding Claim 2, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 1. Soliman further teaches a selection of a power level for

communication between the mobile station and the base station that comprises: referring to a database that correlates locations with power levels; and selecting from the database a power level that is correlated with the location (Figure 2, Column 4 Table 1, Column 7 lines 11 – 29, a power level that is within the power range bounds for the location is selected). Kamel further teaches an initial power level (Section 0035 lines 4 – 11).

Regarding Claim 5, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 2. Kamel further teaches wherein the selected initial power level is an initial base station transmit power level (Section 0018 lines 17 – 20, Section 0041 lines 1 – 4), and wherein engaging in a power control process that regulates causing communication between the mobile station and the base station at the selected power level comprises: setting the base station to transmit at the initial base station transmit power level (Section 0035 lines 4 – 11), whereby the base station responsively transmits at the initial base station transmit power level (Section 0041 lines 1 – 4).

Regarding Claim 6, Soliman teaches all of the claimed limitations recited in Claim 1. Soliman further teaches a base station (Figure 4, Column 8 lines 17 – 20).

Regarding Claim 7, Soliman teaches a method of controlling power of communications between a mobile station and a base station (Column 2 lines 21 – 57), the method comprising: determining a location of the mobile station (Figure 1, Column 4 lines 7 – 15); based on the location, selecting a reverse link set point; using the reverse link set point as a basis to manage mobile station transmit power (Figure 2, Column 4

Table 1, Column 4 lines 63 – 67, Column 7 lines 11 – 29, the reverse link set point is the SNR within the SNR range for the selected location).

Soliman does not teach an initial transmit power for the mobile station.

Kamel teaches an initial transmit power for the mobile station (Section 0018 lines 17 – 20, Section 0041 lines 1 – 4).

Soliman and Kamel both teach a CDMA system that conducts power control and a CDMA system in which there are data transmissions between the mobile stations and base stations thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the initial power level taught by Kamel in the CDMA system of Soliman for the purpose creating an efficient transmission rate, which is typically the highest transmission rate supportable by the available system resources, for the transmission of data as taught by Kamel.

Regarding Claim 8, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 7. Soliman further teaches referring to a database that correlates locations with reverse link set points; and selecting from the database a reverse link set point that is correlated with the location (Figure 2, Column 4 Table 1, Column 7 lines 11 – 29, the reverse link set point is the SNR within the SNR range for the selected location).

Regarding Claim 13, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 7. Soliman further teaches a base station (Figure 4, Column 8 lines 17 – 20).

Regarding Claim 23, Soliman teaches a power control system (Column 2 lines 21 – 57) comprising: means for determining a location of the mobile station (Figure 1, Column 4 lines 7 – 15); means for selecting a power level for communication between the mobile station and the base station, based on the location (Figure 2, Column 7 lines 11 – 29, a power level that is within the power range bounds for the location is selected);

Soliman does not teach an initial power level and, means for engaging in a power control process, starting at the initial power level, that regulates the power used for communication between the mobile station and the base station at the selected power level.

Kamel teaches initial power level (Section 0035 lines 4 – 11) and means for engaging in a power control process, starting at the initial power level, that regulates the power used for communication between the mobile station and the base station at the selected power level (Section 0035 lines 4 – 11, there can be a power control process after the initial power level is selected).

Soliman and Kamel both teach a CDMA system that conducts power control and a CDMA system in which there are data transmissions between the mobile stations and base stations thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the initial power level taught by Kamel in the CDMA system of Soliman for the purpose creating an efficient transmission rate, which is typically the highest transmission rate supportable by the available system resources, for the transmission of data as taught by Kamel.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view Kamel et al. (US 2002/0123362) as applied to Claim 2 above, and further in view of Dohi et al. (US 6,341,224 B1).

Regarding Claim 3, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 2. Soliman further teaches a mobile station that responsively transmits at the selected power level (Column 7 lines 66 – 67, Column 8 lines 1 – 12). Kamel further teaches an initial power level (Section 0035 lines 4 – 11).

Soliman in view of Kamel does not specifically teach sending to the mobile station an instruction to transmit at the selected initial power level.

Dohi teaches sending to the mobile station an instruction to transmit at the selected power level (Figure 2, Column 4 lines 12 – 15, Column 4 lines 26 – 34).

Soliman in view of Kamel and Dohi teach a CDMA system that conducts power control thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the instruction method taught above in Dohi in the CDMA system of Soliman in view of Kamel for the purpose of transmitting at a power level such that a target SIR is consistently maintained as taught by Dohi.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view Kamel et al. (US 2002/0123362) as applied to Claim 2 above, and further in view of Cheng et al. (6,154,638).

Regarding Claim 4, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 2. Kamel further teaches transmitting from the base station to the mobile station at the initial base station transmit power (Section 0018 lines 17 – 20, Section 0041 lines 1 – 4).

Soliman in view of Kamel does not teach wherein the selected initial power level is a Digital Gain Unit and translating the Digital Gain Unit into a corresponding initial base station transmit power.

Cheng teaches a Digital Gain Unit and translating the Digital Gain Unit into a corresponding initial base station transmit power (Figure 6B, Column 7 lines 42 – 45, Column 7 lines 54 – 57, there is a direct relation between the forward link capacity and the forward link power thus there will be a translation of the DGU into a corresponding base station transmit power).

Soliman in view of Kamel and Cheng teach a CDMA system that enables a plurality of wireless users to communicate thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Digital Gain Unit taught above in Cheng in the CDMA system of Soliman in view of Kamel for the purpose of measuring the forward link capacity as taught by Cheng.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view of Kamel et al. (US 2002/0123362) (Kamel 1) in further view of Dohi et al. (US 6,341,224) and in further view of Kamel et al. (US 6,496,531) (Kamel 2).

Regarding Claim 9, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 7. Soliman further teaches measuring the signal energy level S of a signal received from the mobile station (Column 2 lines 40 – 57, in order for the power control loop to maintain the SNR above the minimum threshold there must be a periodic measurement of said SNR to determine if said SNR is within the SNR range for the selected location); based on the energy level and an estimate of air interface noise, N, computing a measured value of SNR (Column 2 lines 40 - 57, in order for the power control loop to maintain the SNR above the minimum threshold there must be a periodic measurement of said SNR to determine if said SNR is within the SNR range for the selected location); comparing a measured value of the SNR with the reverse link set point and determining if said value matches said reverse link set point (Column 2 lines 40 - 57, in order for the power control loop to maintain the SNR above the minimum threshold there must be a periodic measurement of said SNR to determine if said SNR is within the SNR range for the selected location). Kamel 1 further teaches sending to the mobile station an instruction to use the initial transmit power (Section 0018 lines 17 – 20, Sections 0020 – 0021, Section 0041 lines 1 – 4, the system determines if a secondary channel needs to be established and if so the base station or mobile station will be notified to establish said secondary channel and to transmit at the initial power level over said secondary channel).

Soliman in view of Kamel 1 does not specifically teach sending to the mobile station an instruction to adjust transmit power.

Dohi teaches sending to the mobile station an instruction to adjust transmit power (Figure 2, Column 4 lines 12 – 15, Column 4 lines 26 – 34).

Soliman in view of Kamel 1 and Dohi teach a CDMA system that conducts power control thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the instruction method taught above in Dohi in the CDMA system of Soliman in view of Kamel for the purpose of transmitting at a power level such that a target SIR is consistently maintained as taught by Dohi.

Soliman in view of Kamel 1 and in further view of Dohi does not specifically teach an Eb/No.

Kamel 2 teaches an Eb/No (Column 13 lines 45 – 48).

Soliman in view of Kamel 1 and in further view of Dohi and Kamel 2 teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Eb/No taught by Kamel 2 in the CDMA system of Soliman in view of Kamel 1 and in further view of Dohi as an alternative means for measuring link performance as taught by Kamel 2.

9. Claims 10 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view Kamel et al. (US 2002/0123362) as applied to Claim 7 above, and further in view of Hogan (US 6,442,393).

Regarding Claim 10, Soliman in view of Kamel teaches all of the claimed limitations recited in Claim 7. Soliman further teaches receiving a signal at the base

station from the mobile station (Column 2 lines 40 – 44); adjusting the reverse link set point; using the adjusted reverse link set point as a basis to manage mobile station transmit power (Figure 2, Column 7 lines 11 – 29, the SNR ranges are adjusted as the mobile unit changes locations).

Soliman in view of Kamel does not specifically teach measuring a frame error rate of the signal; comparing the measured frame error rate to a threshold frame error rate; determining if the measured frame error rate does not match the threshold frame error rate.

Hogan teaches measuring a frame error rate of the signal; comparing the measured frame error rate to a threshold frame error rate; determining if the measured frame error rate does not match the threshold frame error rate (Column 7 lines 21 – 27).

Soliman in view of Kamel and Hogan teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame error rate taught by Hogan in the CDMA system of Soliman in view of Kamel as an alternative means for measuring link performance as taught by Hogan.

Regarding Claim 11, Soliman in view of Kamel and in further view of Hogan teaches all of the claimed limitations recited in Claim 10. Soliman further teaches based on the location, selecting a bounding value for a reverse link set point; using the bounding value as a basis to limit the reverse link set point (Figure 2, Column 7 lines 11 – 29, the SNR ranges provide the bounds).

Regarding Claim 12, Soliman in view of Kamel and in further view of Hogan teaches all of the claimed limitations recited in Claim 10. Soliman further teaches wherein selecting a bounding value for a reverse link set point comprises: referring to a database that correlates locations with bounding values of reverse link set points; and selecting from the database a reverse link set point that is correlated with the location (Figure 2, Column 7 lines 11 – 29, an SNR within the SNR range for the selected location will be selected).

10. Claims 14, 15, and 17 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view of Dohi et al. (US 6,341,224) in further view of Kamel et al. (US 6,496,531) in further view of Hogan (US 6,442,393) and in further view of Cheng et al. (6,154,638).

Regarding Claim 14, Soliman teaches a location-based power control method for communications between a mobile station and a base station (Column 2 lines 21 – 57), the method comprising: determining a location of the mobile station (Figure 1, Column 4 lines 7 – 15); and based on the location, selecting from a database values of initial mobile station transmit power, reverse link set point, and initial base station transmit power (Figure 2, Column 4 Table 1, Column 4 lines 63 – 67, Column 7 lines 11 – 29, the initial transmit powers for both the base station and the mobile station are set based on the SNR ranges and power ranges for each location, the reverse link set point is the SNR that is bounded by the SNR range for the selected location), instructing the mobile station to transmit at the initial mobile station transmit power (Column 7 lines 11 – 29,

the power level within the range is selected thus there is an inherent instructing of the mobile station to transmit at said power level) transmitting to the mobile station at the initial base station transmit power (Figure 2, Column 7 lines 11 – 29, Column 8 lines 38 – 43), performing a first process comprising establishing a measured value of SNR and determining if the measured value of SNR does not match the reverse link set point (Column 2 lines 40 – 57, in order for the power control loop to maintain the SNR above the minimum threshold there must be a periodic measurement of said SNR to determine if said SNR is within the SNR range for the selected location thus this is an inherent characteristic), adjusting said reverse link set point (Figure 2, Column 7 lines 11 – 29, the SNR ranges are adjusted as the mobile unit changes locations thus the required SNR is adjusted).

Soliman does not specifically teach instructing said mobile station to adjust transmit power.

Dohi teaches instructing said mobile station to adjust transmit power (Figure 2, Column 4 lines 12 – 15, Column 4 lines 26 – 34).

Soliman and Dohi teach a CDMA system that conducts power control thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the instruction method taught above in Dohi in the CDMA system of Soliman for the purpose of transmitting at a power level such that a target SIR is consistently maintained as taught by Dohi.

Soliman in view of Dohi does not specifically teach an Eb/No.

Kamel teaches an Eb/No (Column 13 lines 45 – 48).

Soliman in view of Dohi and Kamel teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Eb/No taught by Kamel in the CDMA system of Soliman in view of Dohi as an alternative means for measuring link performance as taught by Kamel.

Soliman in view of Dohi and in further view of Kamel does not specifically teach performing a second process comprising establishing a measured value of reverse link frame-error-rate and determining if the measured value of reverse link frame-error-rate does not match a threshold value of reverse link frame-error-rate.

Hogan teaches establishing a measured value of reverse link frame-error-rate and determining if the measured value of reverse link frame-error-rate does not match a threshold value of reverse link frame-error-rate (Column 7 lines 21 – 27).

Soliman in view of Dohi and in further view of Kamel and Hogan teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame error rate taught by Hogan in the CDMA system of Soliman in view of Dohi and in further view Kamel as an alternative means for measuring link performance as taught by Hogan.

Soliman in view of Dohi in further view of Kamel and in further view of Hogan does not specifically teach a forward link frame-error-rate.

Cheng teaches a forward link frame-error-rate (Figure 6A, Column 7 lines 51 – 52).

Soliman in view of Dohi in further view of Kamel and in further view of Hogan and Cheng teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the forward link frame-error-rate (FFER) taught in Cheng in the CDMA system of Soliman in view of Dohi in further view of Kamel and in further view of Hogan for the purposes of determining the forward link performance as taught by Cheng.

Regarding Claim 15, Soliman in view of Dohi in further view of Kamel in further view of Hogan and in further view of Cheng teaches all of the claimed limitations recited in Claim 14. Soliman further teaches a base station (Figure 4, Column 8 lines 17 – 20).

Regarding Claim 17, Soliman in view of Dohi and in further view of Kamel teaches all of the claimed limitations recited in Claim 16. Soliman further teaches adjusting the set point (Figure 2, Column 7 lines 11 – 29, the SNR ranges are adjusted as the mobile unit changes locations thus the required SNR is adjusted).

Soliman in view of Dohi and in further view of Kamel does not specifically teach monitoring an error rate of signals received from the mobile station; determining if the error rate matches a predetermined threshold;

Hogan teaches monitoring an error rate of signals received from the mobile station; determining if the error rate matches a predetermined threshold (Column 7 lines 21 – 27);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a design preference and use the FER taught in Hogan in

the wireless system of Soliman in view of Dohi and in further view of Kamel as an alternative means for determining reverse link performance such that the reverse link power is properly controlled.

Regarding Claim 18, Soliman in view of Dohi in further view of Kamel and in further view of Hogan teaches all of the claimed limitations recited in Claim 17. Soliman further teaches periodically repeating steps (Column 2 lines 40 – 57, in order for the power control loop to maintain the SNR above the minimum threshold there must be a periodic measurement of said SNR, which means that the base station must take periodic repeating steps to measure the SNR in order to determine if said SNR is within the SNR range for the selected location thus this is an inherent characteristic).

Regarding Claim 19, Soliman teaches all of the claimed limitations recited in Claim 18. Soliman further teaches detecting a new location of the mobile station (Figure 1, Column 4 lines 7 – 15); and repeating steps based on the new location (Column 2 lines 40 – 57, Figure 2, Column 7 lines 11 – 29, in order for the power control loop to maintain the SNR above the minimum threshold for the selected location there must be a periodic measurement of said SNR, which means that the base station must take periodic repeating steps to measure the SNR in order to determine if said SNR is within the SNR range for the selected location thus this is an inherent characteristic, the base station must also take periodic repeating steps in order to constantly determine the location of the mobile station such that the proper power and SNR thresholds are set thus this is an inherent characteristic).

11. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view of Dohi et al. (US 6,341,224) and in further view of Kamel et al. (US 6,496,531).

Regarding Claim 16, Soliman teaches a method of controlling power of communications between a mobile station and a base station (Column 2 lines 21 – 57), the method comprising the following steps: determining a location of the mobile station (Figure 1, Column 4 lines 7 – 15); based on the location, selecting a set point and a mobile station transmit power (Figure 2, Column 7 lines 11 – 29, a power level that is within the power range bounds for the location is selected, the SNR range is the set point); instructing the mobile station to transmit at the mobile station transmit power (Column 7 lines 11 – 29, the power level within the range is selected thus there is an inherent instructing of the mobile station to transmit at said power level) computing an SNR measure for a signal received from the mobile station; determining if the SNR measure matches the set point (Column 2 lines 40 - 57, in order for the power control loop to maintain the SNR above the minimum threshold there must be a periodic measurement of said SNR to determine if said SNR is within the SNR range for the selected location thus this is an inherent characteristic).

Soliman does not specifically teach instructing the mobile station to adjust the mobile station transmit power.

Dohi teaches instructing said mobile station to adjust the mobile station transmit power (Figure 2, Column 4 lines 12 – 15, Column 4 lines 26 – 34).

Soliman and Dohi teach a CDMA system that conducts power control thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the instruction method taught above in Dohi in the CDMA system of Soliman for the purpose of transmitting at a power level such that a target SIR is consistently maintained as taught by Dohi.

Soliman in view of Dohi does not specifically teach an Eb/No.

Kamel teaches an Eb/No (Column 13 lines 45 – 48).

Soliman in view of Dohi and Kamel teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Eb/No taught by Kamel in the CDMA system of Soliman in view of Dohi as an alternative means for measuring link performance as taught by Kamel.

Regarding Claim 20, Soliman in view of Dohi and in further view of Kamel teaches all of the claimed limitations recited in Claim 16. Soliman further teaches a base station (Figure 4, Column 8 lines 17 – 20).

12. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,490,460) in view of Hogan (US 6,442,393) and in further view of Cheng et al. (6,154,638).

Regarding Claim 21, Soliman teaches a method of controlling power of communications between a mobile station and a base station (Column 2 lines 21 – 57), the method comprising the following steps: determining a location of the mobile station

(Figure 1, Column 4 lines 7 – 15); based on the location, selecting a base station transmit power level (Figure 2, Column 7 lines 11 – 29, a power level that is within the power range bounds for the location is selected); transmitting from the base station at the base station transmit power level (Figure 2, Column 7 lines 11 – 29, Column 8 lines 38 – 43); adjusting the base station transmit power level (Figure 2, Column 7 lines 11 – 29, the power level is adjusted based on the location of the mobile station).

Soliman does not specifically teach monitoring an error rate of signals that are received and determining if the said error rate matches a predetermined threshold.

Hogan teaches monitoring an error rate of signals that are received and determining if the said error rate matches a predetermined threshold (Column 7 lines 21 – 27).

Soliman and Hogan teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame error rate taught by Hogan in the CDMA system of Soliman as an alternative means for measuring link performance as taught by Hogan.

Soliman in view of Hogan does not specifically teach error rate signals received by the mobile station.

Cheng teaches error rate signals received by the mobile station (Figure 6A, Column 7 lines 51 – 52).

Soliman in view of Hogan and Cheng teach a CDMA system that measures link parameters to determine link performance thus it would have been obvious to one of

ordinary skill in the art at the time the invention was made to use the forward link frame-error-rate (FFER) taught in Cheng in the CDMA system of Soliman in view of Hogan for the purpose of determining the forward link performance as taught by Cheng.

Regarding Claim 22, Soliman in view of Hogan and in further view of Cheng teaches all of the claimed limitations recited in Claim 21. Cheng further teaches a Digital Gain Unit that is translated into a corresponding base station transmit power (Figure 6B, Column 7 lines 42 – 45, Column 7 lines 54 – 57, there is a direct relation between the forward link capacity and the forward link power thus there will be a translation of the DGU into a corresponding base station transmit power).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond S. Dean
August 28, 2004

NICK CORSARO
PRIMARY EXAMINER